The Blurb

A Publication of
THE PHIL-MONT MOBILE RADIO CLUB, INC.
c/o 641 KISMET ROAD, PHILADELPHIA, PA 19115-1114

THE FRANKLIN INSTITUTE SCIENCE MUSEUM
PHILADELPHIA
AMATEUR RADIO
W3AA
STATION
PHIL-MONT MOBILE RADIO CLUB

JACK HARING
VIRGINIA HARING - W3IIN W3IIM
2113 Edgehill Drive R
Furlong PA 18925-1101

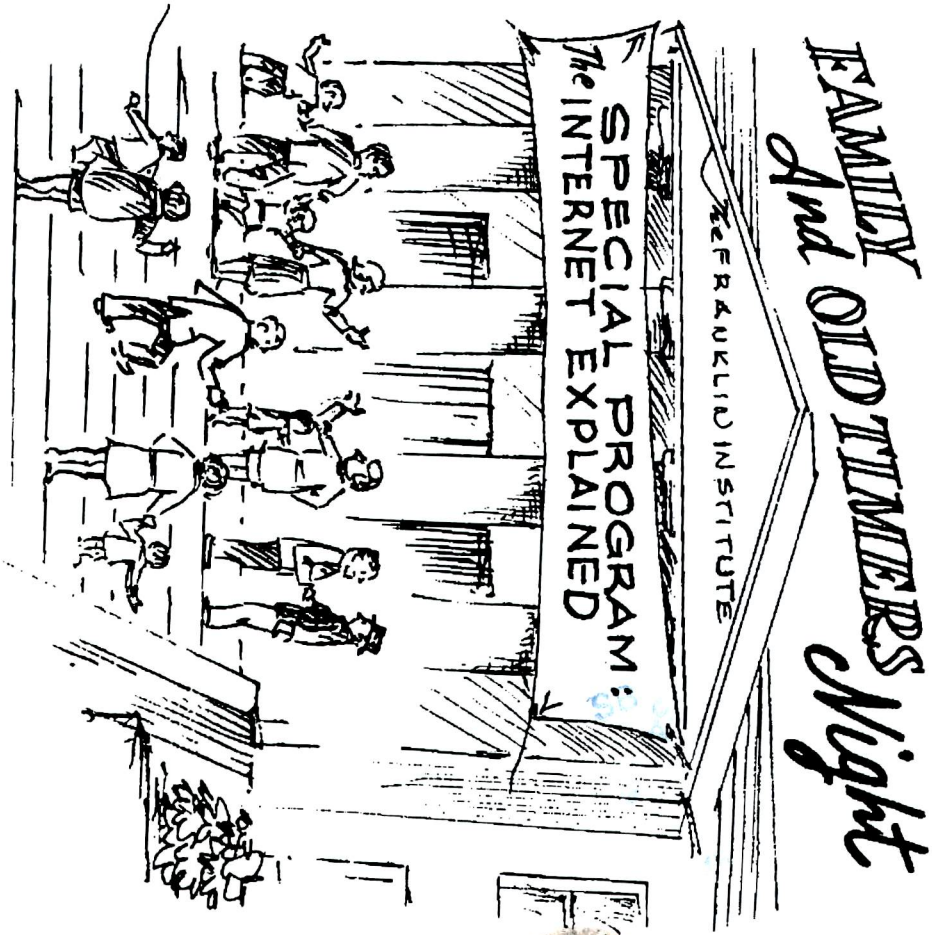
FIRST CLASS MAIL

PHIL-MONT MOBILE RADIO CLUB

The Blurb

NOVEMBER 1996

FAMILY And OLD TIMERS Night



Public Service Since 1949

SPECIAL SERVICE CLUB

VOLUME 46 **NUMBER 11**
is published monthly by, and for, the members of **The PHIL-MONT MOBILE RADIO CLUB, INC.** whose purpose is to promote Amateur Radio in general, and Mobile Radio in particular. Copying and quoting is permitted with a credit line. We gladly exchange publications with other amateur radio clubs; requests should be sent to the Editor. Subscriptions are available to nonmembers for $10 addressed to the Treasurer. The club meets sometime after 7:30 p.m. on the first non-holiday Wednesday of every month at **The Franklin Institute Science Museum**, Benjamin Franklin Parkway at 20th Street, Philadelphia. Enter from Winter Street or the parking garage on 21st street. **ALL VISITORS ARE WELCOME!** **Amateur Radio License Examinations** are held on the first non-holiday Thursday of every month at The Franklin Institute Science Museum—doors close at 6:30 p.m.-*SHARP!*

CLUB INFORMATION

Mailing address: P.O. Box 88, Abington, PA 19001
Internet Web site: http://www.comcat.com/pmrc
E-mail: pmrc@comcat.com
2-meter repeater: 147.03 MHz (Main site Roxborough receiver requires no PL, but outputs 91.5 Hz.)
Additional off-site receivers require the following subaudible tones:
Southampton 131.8 Hz—*Center City* 103.5 Hz—*Lansdale* 114.8 Hz—*Broomall* 85.4 Hz
70cm repeater: 444.80 MHz (186.2 Hz PL)
Simplex: 147.51 MHz
24-hour club information at W3AA: 215-448-1139

STATIONS

W3QV - 147.03 MHz. repeater - 8200 Ridge Avenue, Philadelphia, PA - Trustee W3BBB
W3EM - Field Day and special events station - Trustee W3VVS
W3AA - (Formerly W3TKQ) The Franklin Institute Science Museum, Philadelphia, PA - Trustee WU3I
The club sponsors this world-class demonstration station, and welcomes all licensed amateurs to operate it.
W3AA packet BBS frequency: 144.99 MHz: w3aa@w3aa.#sepa.pa.usa.noam
W3AA e-mail: w3aa@fi.edu

OFFICERS

PRESIDENT: WU3I, Steve Hoch, 4638 Oakland Street, Philadelphia, PA 19124 215-535-8061
shoch@comcat.com—wu3i@w3aa.#sepa.pa.usa.noam
1st VICE PRESIDENT: N3FVI, Bill Popovic, 343 Lemonte Street, Philadelphia, PA 19128 215-487 9472
billpopovic@msn.com
2nd VICE PRESIDENT: KA4LIF, Thom Scott, 7034 Gillespie Street, Philadelphia, PA 19135 215-331-1118
scott.tom@forum.va.gov—ka4lif@ke3cz.#sepa.pa.usa.noam
SECRETARY: AA3CH, Russ Stafford, RD-1 Box 426, New Castle, DE 19720 610-497-4590
russ@hdj.com—aa3ch@aa3ch.#sepa.pa.usa.noam
TREASURER: KB3IV, Ed Masarsky, 15 Poe Avenue, Wyncote, PA 19095 215-572-5238

DIRECTORS

AA3EP (97); K3GNM (97); W3BBB (96); W3RM (96); N3GMH (A); K3KUD (A); W3QZO (A)

COMMITTEES

Archives:	W3IIN
Audit:	~ ~ ~
Blurb Folding:	WB3KOH&J
Budget:	K3KUD
Directory:	WB3KOJ
Education:	AA3CH
Emerg. Coord.:	W3BBB
Field Day:	N3IEI
Membership:	KA4LIF
Net Control:	KB3IV
Program:	N3FVI
Publicity:	N3IEI
Refreshments:	N3FVI
Repeater:	W3BBB
Special Events:	AA3EP
VE Program:	ND3Q
TVI:	W3VVS
W3AA:	KB3IV
Welcome:	~ ~ ~

Blurb STAFF

Editor: W3IIM, Jack Haring
2113 Edgehill Drive, Furlong, PA 18925
215-794-7623
w3iim@chmc.com
Artist: N3QIE
Labels: WB3KOJ

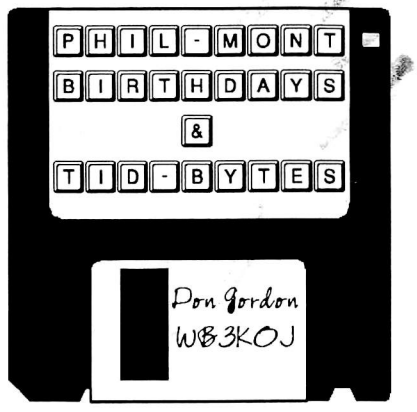
DEADLINE: To be assured of publication in the current month, all copy MUST be in the hands of the Editor at the Bored of Directors' Meeting!

NET SCHEDULE

SUNDAY	09:30	147.030	MHz FM	"SUNDAY MORNING 2 METER NET"
	10:00	28.993	MHz SSB	"10-ON-10 NET"
	10:20	3.993	MHz SSB	75 METER NET
TUESDAY	20:00	147.030	MHz FM	CW PRACTICE NET
LAST WED	20:00	147.030	MHz FM	W3AA OPERATORS' NET

NOVEMBER BIRTHDAYS

04 Arlene Spare (XYL N3TAL)
Charlie Weigand - AA3EP
05 Delores Malone (XYL N3MGS)
Al Tribble - W3STW
08 John Carbonaro - WA3TPH
09 Walter Rice Jr - N3RCR
Gladys Schlichting - (XYL N3EMN)
12 Arnold Sadwin - KC2HX
13 Chuck Snyder - W2SHA
18 "Gil" Gilpin - W3SRU
19 Brad Swanson - N3GLH
22 Bill Popovic - N3FVI
24 Roxanne Pearlstein - N3KQH
Delores Policarpo (XYL N3GMH)
Gina Policarpo - N3QKZ
25 Dusty Rhoads - ND3Q
27 Mel Toren - W2GMA
29 Bob Namm - K3RRC
Bob Nicotero - KB2ERL
Betty Walmsley (XYL WO3D)



MEMBERSHIP STATS

163 Fully paid
22 Family
3 Honorary
3 Pending

OMISSIONS, ADDITIONS & CHANGES

'Sorry, I missed N3AXJ [n3axj@juno.com]
Change N3OWM to [theojkat@voicenet.com]
And W3HFY to [104346.2711@compuserve.com]
And W3PWG to [w3pwg@ix.netcom.com]
Write to KA3VLJ at school [cxp305@psu.edu]
Contact NZ3O at [nz3o@juno.com]
He got it all together! The Mayor of Trevose can be reached at [wstw@juno.com] (That's right, no '3')
WA3AUN now gets mail at [mark4254600@mem.po.com]
W3GQD is incogneto at [billch1@juno.com]
Our hurricane coordinator [w3sru@peganet.com]
He found a FREE one [k3jjo@juno.com]
Want an International spot? Contact N3OWJ (4X land) [geoffm@cs.huji.ac.il]
A stranger has surfaced [n3izz@netaxs.com]

HELP PHIL-MONT

Are you planning to join ARRL or renew your current membership? Help P.M.R.C. by joining or renewing through the club, contact Ed Masarsky, KB3IV, for details.

"DON'T TAILGATE... WAIT"—for the courtesy 🔔!

Marcus Hook aims to tune out static

Ordinance targets ham/CB radio operations

A borough ordinance governing ham and CB radio operations came one step closer to reality Monday night as borough council voted to advertise the new law with passage slated for next month.

The ordinance was penned by Borough Solicitor James F. Proud following a visit from FCC officials who monitored some of Marcus Hook's trouble spots

The proposed law comes in the wake of complaints from borough residents about television, radio and phone static caused by CB and ham radio operators.

"The FCC is the primary governing agency, and it has certain standards. If the hams operate at that level, it's legal, Proud explained. "Even operating at legal levels, neighbors might have static because their televisions may be old or inexpensive. In that case, the neighbors must get filters, because there's nothing we can do if the operators aren't exceeding the legal levels."

The biggest problem, Proud said, is that the FCC has only two people to monitor five states This kind of issue, he said, is a low priority for them.

"What this ordinance does," he said, "is, in the absence of the FCC coming down, is to give our police the right to knock on doors and monitor the power levels of CBs. If the federal levels are being exceeded, we then have the right to issue a citation."

The new law will also regulate the height of CB antennae when broadcasting is not going on.

"If the operator doesn't have a retractable antenna we can make him get one," Proud explained. "When not broadcasting, the antenna cannot be ten feet above the peak of the roof."

Resident and CB operator Paula Houser thanked borough officials for calling in the FCC. "I know that sounds odd," she said, "but not only were householders having problems with some operators, but other CB operators were having problems, too. I've been a CB operator for 20 years, and I've talked to the people on my street, and there are no problems. But some of the others drive me crazy."

Proud said that on their visit, FCC officials had also conducted some community relations. "It was determined that two operators were in violation of the allowed power levels," he said. "One of them wasn't home, but the other was, and the FCC talked to him, and his operation is no longer a problem."

Delaware County Daily Times via AA3CH

The PREZ SEZ

Steve Hoch, WU3I

WOW! 'Got cold for a few weeks there, and seemed like Fall was going to pass us by. Thank goodness the editor came back, and brought some warm weather with him.

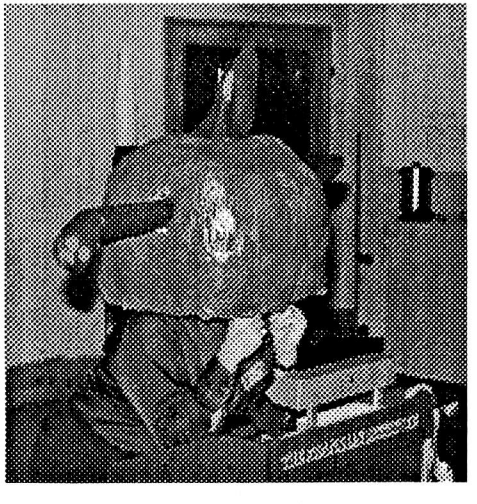
The Meeting this month promises to be a winner with Mitchell Smith from ComCAT services to show us all the goodies on the Internet. Special refreshments to be provided. This is a combination Family Night & Old Timers' Night, so bring the family! They want to see how the Internet works too. Also if you know of a senior member you can bring, contact them and offer a ride. A number of our older members find it difficult to drive at night, and would appreciate the offer.

Remember, this meeting is the close of nominations, and you must have your party registered by the close of the November 6 meeting. I have heard numerous comments over the years of how things can be done differently and better. This is the time to put your service where you have been putting your comments.

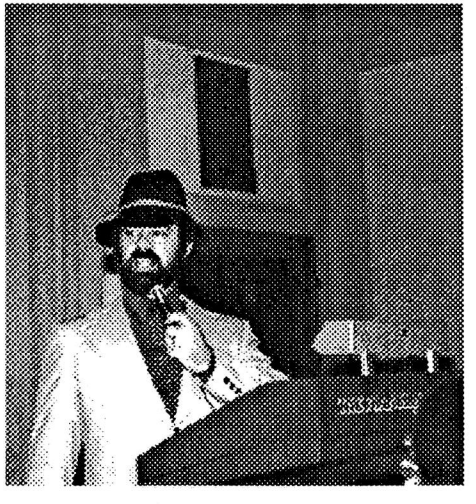
Congratulations to the Field Day gang for the good showing in QST placing 13 out of 38 entries in the 6A category.

SEE YOU AT THE MEETING!

Electioneering in 1982



WB3KOJ wearing a bright red apple.



KB3IV as a gangster.

UPCOMING

Nov 6 — **General Meeting**
Combined
Family and Old Timers' Night
Program: "The Internet"
Special Refreshments

Nov 7 — License Examinations at The Franklin Institute

Nov 13 — Directors' Meeting at NU3Y's

~ ~ ~

Dec 4 — **General Meeting**
Election Night

Dec 5 — License Examinations at The Franklin Institute

Dec 18 — Directors' Meeting at W3QZO's

HAMFESTS

1997
July 15 — KIMBERTON, PA
MARC's "Valley Forge Hamfest"

Federal Communications Commission
1270 Fairfield Road
Gettysburg, PA 17325
Internet: `http://www.fcc.gov`
License Information
800-322-1117—M-F 0800-1630
Fax-On-Demand
202-418-0177

V.E. TEST LOCATIONS

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must two means of positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. **The ARRL VEC's 1996 test fee is $6.05;** *there is no charge for a Novice test.*

- **The FRANKLIN INSTITUTE**
  Monthly, 1st Thursday—Dusty Rhoads, ND3Q
  (215) 879-0505 *day*, (215) 448-1139 *24-hours*
- **BELLMAWR, NJ**
  Bill Helmatag
  (609) 933-1500
- **BRYN MAWR**
  Bob Lees
  (215) 265-6032
- **LEVITTOWN**
  George LeNoir, WR3B
  (215) 943-4886
- **LINWOOD, PA–(Commercial & Amateur Exams.)**
  Russ Stafford, AA3CH
  (610) 358-2311
- **MORRISVILLE**
  Dave Munson, NM3K
  (215) 788-7515
- **POTTSTOWN**
  Warren Erdman K3ZXQ
  (215) 679-5764
- **TELFORD**
  Warren Erdman K3ZXQ
  (215) 679-5764
- **UNIVERSITY OF PA**
  Jeff DePolo
  (215) 898-8538 *shack*, (215) 337-7383 *home*
- **WARMINSTER**
  Tom Michaud, WA3TQJ
  (215) 343-3494

PUBLIC SERVICE EVENTS

Charlie Weigand, AA3EP (610) 323-1050
Russ Stafford, `russ@hdj.com`

Dec 1 — Brian's run
April 13 — M.S. walk
April 20 — M.S. walk
Sept 27-28 — M.S. 150 city to shore bike tour

If you have Windows 3.0, upgrading just the UARTs will generate a much smaller benefit. I would suggest starting with the UARTs, then upgrade to 3.1, then add a driver if needed.

Editor's note: CYBERCOM.DRV, a driver which I use with no problems, is available from the following Web site:
`ftp://oak.oakland.edu/pub/simtelnet/win3/drivers/cybercom.zip`

RADIO MILESTONES

1912: The sinking of the SS Titanic proves the value of wireless at sea.

1928: The radio show, "Amos and Andy" debuts.

1929: Philadelphia's WPEN signs on at 950 kHz.

May 1931: New York Graphic columnist Ed Sullivan makes his radio debut on CBS. Ironically, his first guest was Jack Benny, who was also making his first radio appearance.

March 1932: CBS, NBC and WOR go to around the clock operations to cover the Lindburgh kidnapping. United Telephone, Western Union, Postal Telegraph and New Jersey Bell all scramble to find wire facilities out of tiny Flemington to satisfy the press services and radio networks.

1933: President Franklin Roosevelt becomes the first president to appear on television and RCA/NBC begins regular television broadcasting with the opening ceremonies for the New York World's Fair.

1935: "Major Bowes and His Original Amateur Hour" premieres on NBC.

March 1940: Sun Oil Company becomes TVs first regularly scheduled advertiser by sponsoring Lowell Thomas' newscast on NBC's experimental station W2XBS.

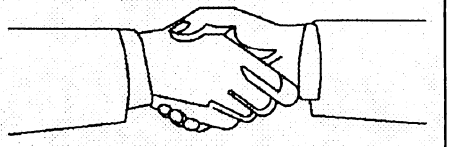
April 1941: "Duffy's Tavern" premieres with the first in its long-running comedy series.

1941: Earle Graser, radio's "Lone Ranger" is killed in a car accident and, for a period of several broadcasts, the Ranger was said to be very ill and his character wasn't heard except for the sound of heavy breathing. After several broadcasts, the show's narrator, Brace Beemer, assumed the role until the final broadcast of the series in 1954.

March 1949: WFLN-FM signs on in Philadelphia at 95.7 mHz with 50 kW.

1954: Attendees at the IEEE convention in New York see the first demonstration of a fully-transistorized radio.

Delmont's Rag Chew



NEW MEMBER APPLICATION

CALL:	**AA3EQ**
NAME:	**Lenard Hughes**
HANDLE:	Len
CLASS:	Extra
ADDRESS:	1960 Stirrup Court Boothwyn, PA 19061
OCCUPATION:	
HOME PHONE:	610-484-0151
BUSINESS PHONE:	610-494-6621
E-MAIL:	
PACKET:	aa3eq@aa3ch.#sepa.pa.usa.noam
INTERESTS:	Public service; Field Day; W3AA

out for IRQ conflicts without a new driver).

Simply upgrading to 16550A UARTs will not completely solve all overrun problems.

DOS doesn't provide any support at all for the 16550A. It is up to each serial app to test for UART type and support it as appropriate. You can't even write a generalized boot-time app to enable the FIFO because that can result in events unexpected by typical DOS programs.

In Windows, the standard MS serial drivers don't take full advantage of the 16550A. The Windows 3.0 drivers are even less capable, and the Windows 3.1 drivers have the following limitations:

- They enable only the receive FIFO, and only at rates above 2400 bps.
- They never enable the transmit FIFO, which results in an interrupt rate of 10x during uploads.
- They set the trigger level at 14 bytes (too high - it's easy for 2 more bytes to arrive before the driver can read the FIFO).
- The Ports menu of the Control Panel only allows speeds up to 19200. With a V.32bis modem, sparse data and text can easily compress 3:1 or more, suggesting that a host DTE connect rate of 57,600 bps would be effective.
- Windows provides no workaround for apps that don't provide port speed options above 19200 bps.
- The API won't accept rates above "CBR_128000".
- The API won't let DOS programs know there is a 16550 there, so I/O from a DOS app will still be based on the interrupt-per-character model. Even if the Win16 API made the 16550 visible, DOS programs that aren't 16550-aware get little benefit from a 16550 port with the standard drivers.
- They don't allow IRQ sharing for COM3,4, even if the hardware is designed for it..
- A "skipped" COM port (no hardware present, or hardware disabled), may prevent any access to higher numbered COM ports that are present.
- The BIOS doesn't initialize COM3,4 properly in many systems, and Windows doesn't necessarily clean this up properly when booted..

If you have a 16550A, and you don't upgrade your driver software, at least add the line... COMxFIFO=1 ...in the [386enh] section of \WINDOWS\SYSTEM.INI Replace "x" with "1" thru "4" depending on the affected COM port number. This line enables the FIFO for Windows apps, although with the limitations enumerated earlier. This won't help much for DOS apps running in/under windows, because Windows 3.x still presents them with an 8250 register model.

A few Windows applications provide their own drivers. For example, "WFXCOM.DRV" is supplied with Delrina's WinFAX Pro, and is available on a number of BBS/ftp sites and commercial services like CompuServe. It is supposed to be a general COM driver. I have not tried it myself, and given my unpleasant personal experiences with the aforementioed WinFAX, I'm not inclined to.

A shareware COMM.DRV is reportedly available from Cherry Hill (609) 983-1414. I have no other information on it. [*It works–Ed*]

If you have Windows 3.1, upgrading just the UARTs will solve most of your problems.

MINUTES

OCTOBER GENERAL MEETING

Russ Stafford, AA3CH, Secretary

Our 560th general meeting was opened by our president Steve–WU3I at 19:45 hours in the Sterns Auditorium.

After a short welcome to all members and visitors who attended the meeting, Steve gave a brief talk on next month's speaker from ComCAT, an Internet service provider who will give us a live, on-line demo at the November meeting. Steve then discussed our new PHIL-MONT web page. He also showed off the new plaque from Q.S.T., and read a letter from Mark Wilson–AA2Z, Editor of Q.S.T.

Ed–KB3IV reported on the following: treasurer's opening balance $544.23, income of $79.00, and expenses of $423.25. Ed reported on our budget and asked that you renew your dues (membership) for the A.R.R.L. through the club since we make a few dollars on each renewal.

Regarding our net controls, we could use a few more C.W. Net Controls. All other Net Controls are running just fine.

Charlie–AA3EP reported on the MS-150. We had 141 hams signed up and 135 showed up. (Just a side note, if you sign up you should show up). On Saturday, 3,987 rode on day one. 1,847 rode back on day two. We had 9 taken to the hospital, 28 treated by our EMS staff on site, with 49 treated by the first-aid folks. The ATV worked out very well; the riders would sit for a while and watch other riders out on the route. Maybe next year we can get more of the club ATVers out to help!

A few of our hams received 10 and 15-year plaques for helping on the event! Russ's (AA3CH) 1½ year old grandson, Mikie, even received an award for the being the youngest volunteer. There were three generations of hams on the stage when Mikie got his award, Russ–AA3CH, Holly–KA3MSJ and Mikie (no call yet).

The next event will be Brian's Run in December. It's a very small event, and we will need about 20 hams. (How about members who live in Delaware and Chester Counties volunteering.) It runs through the streets of West Chester.

A big thank you to Bill–N3FVI for the GREAT goodies!

The meeting was closed at 20:02, and the floor was turned over to VP Bill–N3FVI who introduced the program speaker from PECO.

Call
1-800-32-NEW-HAM
for free information for prospective hams

MINUTES OCTOBER DIRECTORS' MEETING

Russ Stafford, AA3CH, Secretary

Our October Mid-Month meeting was opened by president Steve–WU3I at the CHI campus in Broomall, PA, promptly at 20:15 hours.

Our Treasurer was unable to attend the meeting, therefore, nothing to report. K3KUD will have the Budget Committee meeting in November, and the 1997 budget will be printed in the December ***Blurb***.

Repeater: Jim–W3BBB, reported that the 911 auto-dialer has been turned off. The codes will be changed before it comes back on. Jim led a discussion on the voice ID and what it says. A discussion was held on the Center City input.

We then voted on new members KB2TEZ–Richard and N3QNP–William. Both were voted into the club. WELCOME!

Steve reported that the nominating committee still needs folks to run for Phil-Mont office. There is only one slate (full party) running at this time, and five members running for Director. Hey folks, let's get out and support our club! Contact Jeff–KE3UV or Jim–KE3OP to find out who is running, and who needs help to form a party.

Jack–W3IIM led a discussion on the multiparty system, and who might be interested in running for Phil-Mont office. Jeff–KE3UV will be calling down the membership list asking for help.

Steve–WU3I led a discussion on the W3AA station, and some potential changes at The Franklin Institute.

I reported on public service for Charlie–AA3EP. The last event this year is a small one, Brian's Run. This is a small 10k run through the streets of West Chester, PA. About 20 hams are needed; please contact Charlie or me soon.

Here's something new. We will be holding a Phil-Mont auction at the January general meeting. Bring stuff that you would like to get rid of, and a pocket full of cash to take home that radio or boat anchor that you just can't do without. Tell everyone... This should be fun!

The next Mid-Month meeting will be held at the home of NU3Y in North Phila.

The meeting ended at 22:10 hours.

AUTOPATCH CHANGE

Members are requested to announce their callsign prior to *initiating* and *terminating* an emergency or autodial phonepatch. A control operator may, at his discretion, immediately terminate the patch if he is unsure who is making the call.

The need for this change is due to recent unauthorized accesses of the autopatch which could jeopardize the continued availability of this feature.

We ask for your cooperation, and hope that members will not be discouraged from using the autopatch.

Respectfully, the Repeater Committee.

tending to be an 8250 or 16450, even though it may be immune from data loss, system overhead will be higher during I/O. You may not be able to get any useful work done in foreground while a file is being up/downloaded in background.

The Hardware Situation

This applies to serial/COM ports/cards, internal modems/cards, but NOT external modems (What matters is the UART seen at the PC backplane. What's in the modem is generally irrelevant.)

A UART is present anywhere that a serial bit stream needs to be converted to a parallel byte stream, and vice versa. An external modem may well have two; one to convert the mark/space stream to bytes (for internal error control, compression, flow control and protocol processing), and another to convert the user-ready bytes to an RS-232C one/zero stream.

The computer's COM port will have yet another UART, and this is the most important one.

The UARTs on most PC COM ports are based on National Semiconductor Ns8250 or Ns16450 chips (or silicon megacells inside VLSI chips where you can't replace them). You can identify the ostensible UART type on your system by running the MicroSoft diagnostic program:

\DOS**MSD**.EXE for DOS 6.0 or later, with or without Windows

\WINDOWS**MSD**.EXE for WIN 3.1 or later, on any DOS

Be sure to run MSD in DOS *before* bringing up Windows. The Windows serial API may prevent MSD from accurately identifying a 16550 if you run it from a Windows DOS prompt.

The Ns16550A UART has separate 16-byte transmit and receive FIFOs with configurable trigger levels, and can run reliably at clock rates up to 460,800 bps, although with current modem technology, there's no point in pushing your luck by going over 115,200 bps, and many modems have a max DCE-DTE (modem-computer) rate of 57,600. The 16550 has shorter access cycle times than the 16450 or 8250. The 16550 also has DMA capability, but this can't be used without DMA support chips (and probably buffering) that is not customary on serial cards.

So, what UART component hardware do you have?

Try to locate the UART on your mother board, multi-function I/O card, COM board or ISA/MCA modem card. If you can't find a socketed component with the numbers "8250" or "16450", your COM ports are probably buried in VLSI, and you won't be able to perform a chip replacement. If you have an actual 8250 or 16450 chip, but it is soldered in, I don't recommend replacing it unless you are an experienced solder-sucker operator. If you can DISABLE your VLSI or soldered-in COM ports (as I chose to do), you can at least add an aftermarket COM board. Disabling the UART may require throwing switches or configuring non-volatile BIOS registers.

If you DON'T have socketed 8250/16450 chips, you'll need to buy an aftermarket COM or multi-function board. If you have a modem card ("internal modem"), you may not be able to upgrade without replacing the card altogether. In any case, to add a new COM or multi-function card, you'll need to either disable the COM1/2 port(s) you are replacing, or re-assign them to COM3/4 (although watch

So you're thinking about a 28.8 modem?

This article applies to Intel-based systems running Windows 3.0 and 3.1, and to a lesser extent, DOS applications not running under Windows,
Author: Bob Niland (HP)

One of the unadvertised limitations of most current Windows PCs is that their RS-232C (serial, COM) performance is seriously deficient. Almost everyone who purchases a high-speed modem (V.FC, V.32terbo, V.32bis, V.32, PEP or HST) discovers the problem the first time they try to download a file or accept an incoming FAX (at 9600+) after upgrading the modem. Overrun, "CRC" and retry errors abound, even when the only active application is the datacomm or FAX program. If the transfer completes at all, it may take even longer than with the old 2400bps modem.

There are three reasons for the problem:

1. The Universal Asynchronous Receiver/Transmitters (UARTs) used in most PCs are still primitive Ns8250 or 16450 devices with single-byte FIFO (First-In, First-Out) buffers. If the operating system/driver cannot read and flush each character at high interrupt rates, the next incoming character overwrites the FIFO and the previous one is lost. Plain DOS, being a fairly single-minded environment during datacomm, can usually keep up; standard Windows can't, and DOS apps running in standard Windows can't.

2. Windows has more operating system overhead than plain DOS, and interrupts often take longer to service. Overruns are much more likely than under DOS. As soon as you report to your PC/modem vendor that you are losing data, you may be advised that "you need to upgrade to a 16550". However, since there seems to be a conspiracy of ignorance about this issue, you'll often get no useful advice at all. Most of the store-front and mail-order sources I spoke with in attempting to solve my own problem had never heard the term "16550" and many didn't even know what a UART was.

3. Even if your PC has 16550A UARTs (and PS/2's do), or if you can upgrade your mother/COM board or add a new COM board, you may STILL experience errors and overruns because the standard MicroSoft DOS and Windows COM drivers don't take full advantage of the 16550A. Windows 3.1 is improved in this regard over 3.0, but I still recommend a driver upgrade. Applications cannot get around this problem by themselves unless they include a new COMM.DRV.

If you have a modem CARD (i.e. an "internal" modem), you may or may not have a problem, as the modem part of the card can be designed to be aware of the state of the UART, and avoid overrunning it; however, I wouldn't want to bet that the card designers were that clever, and would generally insist on a 16550A UART when buying modem card. Some modem cards don't even have conventional UARTs, but if they are to work with standard Windows drivers, they need to simulate one. Use MSD.EXE (below) to see what type of UART the card is/emulates.

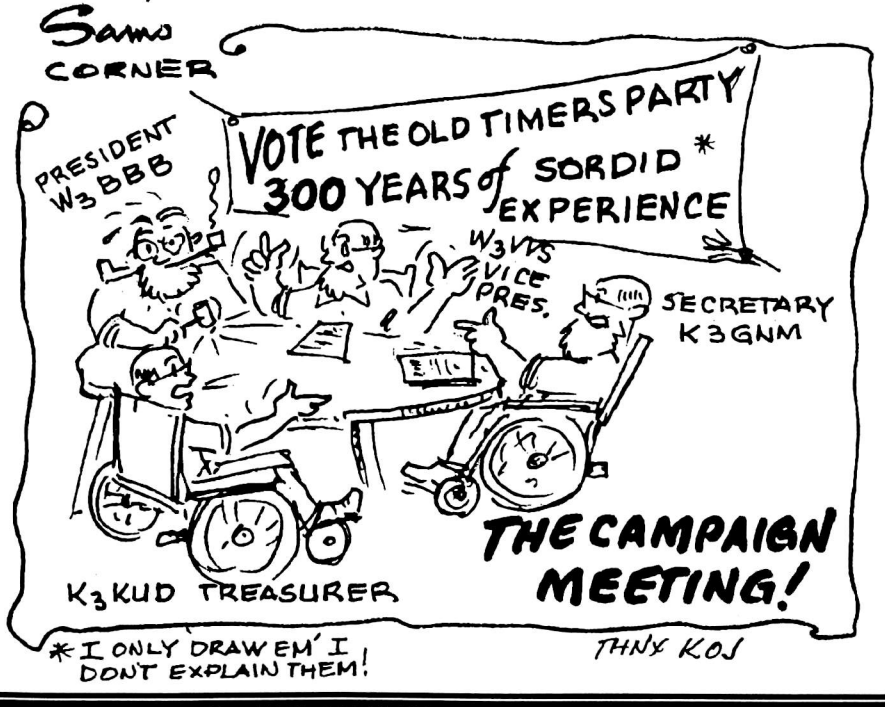
In any case, if the modem card is pre-

138TH MONTHLY VE SESSION STATISTICS
OCTOBER

10 candidates took 19 elements
3 new amateurs plus 2 upgrades

VE team members:
Dusty Rhoads, ND3Q, Chairman
Jim Lear, KB3AIS; Wally Newell, K3JJO; Jim McCloskey, KE3OP; Bob Thomas, W3QZO; Jeff Kerber, KE3UV; Bob Freer, W3YLT

AMATEUR LICENSE EXAMS HELD ON THE FIRST NON-HOLIDAY THURSDAY OF EVERY MONTH
Registration begins at 6:00 PM
Doors close at 6:30 PM *sharp*
THE FRANKLIN INSTITUTE SCIENCE MUSEUM
For Information Call ND3Q at
(215) 448-1139 or 879-0505
Accessible by the handicapped.



THE W3AA REPORT

The International Voice of The Franklin Institute Science Museum

Still waiting for W3BBB to install the Kenwood 2570 into the console... Soon I hope!

'Received an invite from WN3K–Bob from HRO in Delaware to attend a KENWOOD showing October 23, 1996 at the Ramada Inn across from the store in Delaware. Attending will be WU3I, AA3CH and KB3IV.

'Trying to wrestle free a 6M capable radio for the station. I have all the necessary parts for the 6M antennas except the beam. A rotor from one place, a Ringo from another, some masting and control cable, and all we need is some wall brackets and some time to do the installation (I can make the time somehow).

The Camp-ins for the month of November will be held on Friday, 11/8 and 11/22. Contact Leigh Ann at 448-1133 by the Tuesday before, to volunteer to man the station for either Camp-in. Your commitment will be from 6pm to 11pm.

REMEMBER IT'S YOUR STATION. COME DOWN AND OPERATE IT!!!

Internet: http://www.fi.edu/tfi/exhibits/w3aa.html

MARS

Navy Mars at W3TKQ

In 1977 all the operators of W3TKQ were also members of Navy Mars. They asked permission from the Phil-Mont Mobile Radio Club to apply for a Mars call. The requirements were that the trustee and two club members must be Mars Members.

Rolland Madara, W3PWG. was trustee at that time, and his Mars call was NNN0ARF. Sam Moskowitz–K3RTR was NNN0UKP, Frank Whitten–K3TEF was NNN0UCL, and Fred Fowler–WA3AAL was NNN0XYU.

The permission was given, and in November 1977 they started operating with the Mars call NNN0QPN. Sam and Fred are both now Silent Keys, and Frank who is 91 does not come in any more since he had a stroke. That left Rolland as the only active member, and with the change in station trustee we are no longer eligible for the Mars station, so it is now terminated with almost nineteen years of service in which we filled four log books, and passed quite a few messages between servicemen and their families. In October, Rolland completed 34 years in Navy Mars.

W3PWG

All CW nets and other CW activity in the Military Affiliate Radio System (MARS) were ordered to cease operation effective October 1, 1996. After that time, no CW nets or other CW activity will be allowed on any DOD MARS frequencies.

A final MARS CW message was transmitted simultaneously on Army, Navy and Air Force MARS frequencies at 1300, 1530 and 1700 UTC on September 30. MARS members earned a certificate for correct copy of the final message.

ARRL

---

29. "I go for a man who wears an A_____ hat."
30. "H_____ everybody, H_____..."
31. "Look for the package with the ship that sails the ocean." _____ _____ _____ _____.
32. "Who put eight great tomatoes in that little bitty can?" _____.
33. "I'm not talking while the flavor lasts." _____ _____.
34. "Stronger than dirt - _____."
35. "Get W_____ R_____ Cream Oil, Charlie."
36. "L____ Radio Theater presents..."
37. "R_____'s one cent sale" (drug store chain).
38. "There's a F_____ in your future."
39. "See the USA in your _____."
40. "Hey, C_____ man."

Delmont's Rag Chew

Come to the Ol' Timers' Night meeting for the answers!

HOW MANY DO YOU REMEMBER?

Here are forty old, and not-so-old radio commercials and jingles. See how many you remember by filling in the blanks.

1. Have you tried_____? They're whole wheat with all of the bran."
2. The F_____'s Y_____ Hour, directed by Rudy Valley."
3. "_____ _____, 99 and 44/100 percent pure."
4. "R_____ W_____, R_____ B_____, happy little washday soap."
5. "P_____ C_____ hits the spot, 12 full ounces, that's a lot. Twice as much for a_____, too, P_____ C_____ is the_____ _____ _____."
6. "Seeing is believing. See an O_____ wash."
7. (Sound of foghorn - a soap commercial) "_____."
8. "_____, the world's most honored watch."
9. "_____ _____, good to the last drop."
10. "The J_____ program, starring Jack Benny."
11. "The C_____ and S_____ Hour, starring Charlie McCarthy."
12. "Get after your cold with a sparkling glass of S_____ H_____."
13. "S_____'s L_____, your faithful friend for aches and pains."
14. "When your eyes are tired, get immediate relief with two drops of _____."
15. "S_____ S_____, S_____ S_____, lots more suds from S_____ S_____. Richer, longer lasting, too, they're the suds that s_____ d_____.
16. "From bumper to tail light, you're always right with A_____ L_____."
17. "D_____, the soap that d____ everything."
18. (Train whistle, then sound of engine going...) "B_____ S_____, B_____ S_____."
19. "The C_____ C_____ Hour." (Moo).
20. "B_____, B_____, the brushless shaving cream supreme, leaves your face so smooth and clean."
21. "She's lovely, she's engaged, she uses _____."
22. "I'm C_____ B_____ I've come to say ..."
23. "Are you cooking with C_____?"
24. "Laugh a while, let a song be your smile, use F_____ S_____..."
25. This commercial was found in a series of rhyming road signs. "_____ _____."
26. C_____ L_____ L_____ Pills."
27. "Get a can of Doctor L_____'s Tooth Powder today."
28. "You'll wonder where the yellow went (finish the jingle) W_____ _____ _____ _____ _____ _____ _____."

Platform of "The Party of Goals"

As Phil-Mont's Premier Party of Candidates, we have had considerable discussions as to the direction that PMRC should take into the next century. The following are some of our goals:

Committees:

Revamping our membership committee. Having actual committees that report to the membership each month.

Recordkeeping:

Automating our accounting and financial systems.

Meetings:

Improving the quality of meetings by adding more items of interest. Inviting speakers to present topics that will entice you to attend, and providing a schedule of events which will be published in the *Blurb* well in advance to allow you to plan on attending.

Youth:

For the young hams. Our party regards them as the "Hams of the Future." We would like to help them to possibly organize their own meetings, and establish their own net. We could guide them with our experience, and gain their interest with topics they can relate to. We can learn from each other.

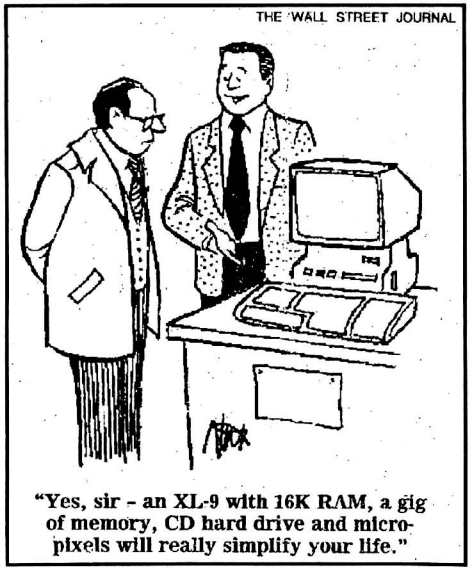
Heritage:

Our party feels that motivation is the key to reestablishing the original foundation that created our club all those years ago. Our founding fathers established the premier club in the Delaware Valley. We can regain that status once again via an active, interested, motivated membership, and a dedicated party with achievable goals.

With your support and your vote we will obtain these goals... and many more.

Sincerely,

Russ–AA3CH, candidate for President
Bill–W3GQD, candidate for Vice President
Carol–N3PVO, candidate for Secretary
Mike–K2BN, candidate for Treasurer
Jack–W3IIM, party manager
Donald–WB3KOJ, party publicity manager



"Yes, sir - an XL-9 with 16K RAM, a gig of memory, CD hard drive and micropixels will really simplify your life."

CORRECTION

The caption on last month's photo from the club archives should have said

Electioneering in December 1966

GOODIES

Estate Sale

Mosley Pro 67B (same as W3AA) Covers 10, 12, 15, 17, 20 and 40 meters
with 60' Rohn 25G tower and rotor $800.00
Universal 60' tilt over tower no antenna no rotor ..... offers requested

Contact **Tony Musero–K3UKW** at 215-271-8898

EBC JR 2 mtr fm transceiver w/mike and manual	#012	$ 75
Heath HD-15 phone patch w/manual	#022	15
Weston 622 lab meter - 1000ua	#025	10
RG62 coax (90 ohm) - approx 200 ft	#076	10
9890 coax alpha - approx 100 ft	#077	10
Assorted feedline and control cable	#078	5
Digitek pwr sply - 12v@10a & 5v@15a - metered	#090	20
Assorted rotor control heads	#096	20
ME-6-DU vtvm - w/manual	#117	10
Heath GD-1-A grid dipper.-.w/manual	#118	10
Heath V7 vtvm.-.w/manual	#119	10
Heath AG-10 audio generator - w/manual	#120	10
Heath HW-101 w/HP-23 pwr sply	#092	125
North Elec N-14012 pwr sply 12v@10a	#030	30
Worm drive winch w/70 ft ss cable - new	#114	60
National NC-303 rcvr ham bands - w/manual	#124	175
Johnson Invader transmitter - w/manual	#056	125
Drake MN-2700 ant tuner - w/manual	#203	175
Drake DL-300 dummy load	#204	25
Drake desk microphone	#206	10
Heath IM-1210 dvm - w/manual	#210	25
Heath ET-3300 breadboard - w/manual	#213	10
Ten-Tec 700C hand mike	#214	15
Heath SB-1000 linear amp - w/manual 80-10mtrs-1 kw out w/100watts in, vy gd condx	#220	600
Computer/operating desk (assembly required)	#218	20

Items listed are estate residue, and are sold as is. They are returnable in working condition if you find they are not what you require. Phil-Mont handles the sale of this equipment as a service to club members or their spouses at no profit to anyone.

Contact **Jim Spencer–W3BBB** 215-262-5172

November General Meeting

Ol' Timers' Night

&

Family Night

~ ~ ~

Our speaker

Mitchell Smith, President and founder, ComCAT, Inc., Doylestown, PA.
Involved with computers since age 14.
B.S. Engineering and MBA from Lehigh University.

Employment History:

1979 - 1990 Lone Star Industries
Designed and implemented automation of heavy industrial processes and managed automation and plant modernation projects.

1990 - 1995 F.L. Smidth, one of the largest companies in Denmark.
Worked for an F.L. Smidth group company, Fuller Company, that engineered and manufactured automated cement and mineral processing plants. The projects were in Korea, China, Japan, Philipines, Indonesia, Malaysia, India, Pakistan, Israel, and other countries. Developed state-of-the-art heavy industrial plant designs for turnkey international projects costing $20-200 million. Traveled extensively worldwide.

1994 - present
President and founder of Comcat Inc., an Internet Service Provider (ISP) providing service to individuals and businesses throughout Southeastern Pennsylvania.

Presentation Outline

1. Introduction to the Internet
2. Brief History of the Internet
3. How the Internet Works
4. How to use the Internet (E-mail, Web Navigating, Usenet News)
5. About Comcat and Comcat's Network - LAN Servers and Telco Network
6. New developments - ISDN
7. The Future

its own Web site: http:/www.arrl.com).
This group's very name speaks of a long tradition going back to its founding in 1914: the United States Government set aside portions of the radio frequency spectrum for amateurs, who would, in turn, assist in emergencies, explore new technologies and "relay" messages.
Uncharacteristically, the Government left the testing and licensing to the hobbyists themselves, who established grades from Novice to Amateur Extra—each level granting access to more frequencies and requiring more knowledge.
There has been a tradition of pride in these accomplishments. Morse code was the first important digital form of communication, sending out clearly defined sounds that could pierce through the blistering static of early receivers. And the technical knowledge required meant that broadcasters could literally construct the equipment they used.
But this can now seem as quaint as the idea of a "radio relay league." What use is Morse code, and what purpose do radio frequencies serve when E-mail and chat rooms now attract even ham-radio operators?
In 1991, in an effort to increase interest in ham radio, there was an easing of licensing requirements: it is now possible to get a beginning license without any knowledge of Morse code. Mr. Mendelsohn believes that by 1999, the code may be eliminated as a requirement even for the most advanced level.
Already, the new requirements have increased the number of United States licenses to 650,000 from 500,000 in 1990. The technical tests are also likely to change to include more aspects of digital technology.
Mr. Mendelsohn argues that far from being irrelevant in a digital era, the radio amateur has been central, for much that we take for granted in contemporary communications was first devised and tested by hams. More and more amateurs are also linking their PCs to their radios to transmit digital data without the cost of phone lines or Internet providers.
But the deepest appeal of ham radio may be immune to the Internet challenge. Of what use is a PC and the Internet when phone lines are down, or war breaks out, or a storm knocks out power?
Moreover, amateur radio requires a kind of attentiveness that is one of the little-noticed appeals of technology. The Internet is being used by ham-radio operators not as a substitute for ham radio, but as a method of talking about it. In real ham activity technology is not talked about but embedded in the essence of the conversation. For appropriate impact, a conversation with an Australian cattle rancher late at night requires the hiss, the wavering, the static, the efforts to find just the right conditions and moment to make contact.
The Internet may share some of this appeal now, but ultimately it may become as invisible and commonplace as the telephone.
Amateur radio, though, will always require a consciousness of process, if not in learning code, then in studying antennas, sunspots, ionospheric conditions. A listener becomes aware of the difference and distance between voices while making tenuous connections between them. The technology is intrusive, audible, malleable and demanding—which is, if I remember right, just what makes it so appealing.

via KB3AFH

Technology

Edward Rothstein/N.Y. Times

CONNECTIONs Reports of the computer-assisted death of ham radio may be greatly exaggerated.

Few people would ever feel an urgent need to answer the question, "What are the parasitic elements of a Yagi antenna?" or to identify all the causes of "splatter interference." Nor will many ponder "the maximum authorized bandwidth of RTTY, data or multiplexed emission using an unspecified digital code."
But that is because they have never longed to become a ham-radio operator, and never studied for the license exams that pose such questions. All I retain from my youthful goal to achieve ham status are a fascination with electronic circuits, memories of magazines with stories about transmissions in the midst of wars and earthquakes, and a useless ability to translate Morse code at fantastically slow rates of speed.
And one other thing: the magical feeling brought on by the sounds that emerged from these massive rigs with their lighted dials, in which streams of pulsing sound emerged from the staticky ether. For at that time, nearly all amateur radio communication was carried on in Morse code. One operator I knew used a repeating paddle key to stutter out dots and dashes at speeds of 50 words a minute. He seemed to have almost musical ears as he discerned the messages encoded in streams of nonmelodic sound.
Now similar listeners are tuned not to the patter of Morse code but to what computers make of the high-pitched screams of multiple modems making contact over the Internet. And the Net culture has grown out of a technology that seemed just steps away from the ham: garage-built computer kits had the aura of do-it-yourself mystery and mastery; they were clunky, intimidating, demanding expertise.
So there was ample ground on which the two cultures could meet. And they have. There, on the Net, courting paradox, the masters of shortwave transmissions are sending messages via bulletin boards, mailing lists, and sites on the World Wide Web. No code. No radio waves. No schematics. No licenses.
The hobbyists of one old electronic technology are meeting on the grounds of the new one. But these are not always happy encounters. For in addition to the ritual discussion of hardware, some hams on the Net are arguing over what the new technology has done to their world. There are those who welcome it as an evolutionary force, and those who regret the passing of revered guild principles as new hams are being courted.
"In the next two decades or so," reads one recent post on America Online, "which will be more important for communication—knowing how to operate a computer and use digital modes of communication, or being able to pound out code?"
"The real issue," counters another ham, objecting to easier licensing requirements, "is the lowering of standards." Where has the Internet left ham radio?
"That is one of the key questions," confirmed Stephen Mendelsohn [WA2DHF] a vice president of the American Radio Relay League, the nation's premiere lobby and hobby group with 172,000 members (and

1996 NOVEMBER 1996

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
PHIL-MONT MOBILE RADIO CLUB		The surest sign that intelligent life exists elsewhere in the universe is that it has never tried to contact us.			1	2
3 2M NCS N3OWM 10M NCS W3HFY 75M NCS W3PWG	4	5 CODE PRACTICE NET at 8 PM N3FVI *Election Day*	6 **GENERAL MEETING** **at** **The Franklin Institute** Refreshments at 7:00 p.m. Meeting starts at 7:30.	7 **LICENSE EXAMS** **at** **The Franklin Institute** Registration begins at 6:00 Doors close at 6:30 p.m. ***sharp!***	8	9
10 2M NCS W3STW 10M NCS W3HFY 75M NCS W3STW	11 ● *Veterans' Day*	12 CODE PRACTICE NET at 8 PM W3RM	13 DIRECTORS' MEETING at NU3Y's	14	15	16
17 2M NCS WB3KOJ 10M NCS W3HFY 75M NCS AA3CH	18	19 CODE PRACTICE NET at 8 PM K3JJO	20	21	22	23
24 2M NCS KB3IV 10M NCS W3HFY 75M NCS KB3IV	25 ○	26 CODE PRACTICE NET at 8 PM WA3NSP	27	28 *Thanksgiving*	29	30 *Hurricane Season Ends*